

Title (en)

REFRIGERATION CYCLE DEVICE FOR VEHICLE

Title (de)

KÄLTEKREISLAUFVORRICHTUNG FÜR EIN FAHRZEUG

Title (fr)

DISPOSITIF À CYCLE DE RÉFRIGÉRATION POUR VÉHICULE

Publication

**EP 3825383 A4 20221005 (EN)**

Application

**EP 19838054 A 20190716**

Priority

- JP 2018134448 A 20180717
- JP 2018227398 A 20181204
- JP 2018230259 A 20181207
- JP 2019013979 A 20190130
- JP 2019013974 A 20190130
- JP 2019018617 A 20190205
- JP 2019019701 A 20190206
- JP 2019078133 A 20190416
- JP 2019084708 A 20190425
- JP 2019112408 A 20190617
- JP 2019115584 A 20190621
- JP 2019027988 W 20190716
- JP 2019027031 W 20190708

Abstract (en)

[origin: EP3825383A1] No studies have been made regarding what kinds of refrigerants should be used in a refrigeration cycle device for a vehicle. An air conditioner (1) for a vehicle includes a refrigerant circuit (10) and a refrigerant that is sealed in the refrigerant circuit (10). The refrigerant circuit (10) includes a compressor (80), a first heat exchanger (85), which serves as a heat dissipater in a dehumidifying heating mode, an outside-air heat exchanger (82), a cooling control valve (87), and a second heat exchanger (86), which serves as an evaporator in the dehumidifying heating mode. The refrigerant is a refrigerant having a low GWP

IPC 8 full level

**C09K 5/04** (2006.01); **B60H 1/32** (2006.01); **F25B 1/00** (2006.01)

CPC (source: CN EP KR US)

**B60H 1/22** (2013.01 - CN); **B60H 1/3204** (2013.01 - EP); **B60H 1/3227** (2013.01 - US); **B60H 1/3228** (2019.05 - CN); **B60H 3/02** (2013.01 - CN); **C09K 5/04** (2013.01 - CN EP KR); **C09K 5/045** (2013.01 - EP US); **C10M 171/008** (2013.01 - US); **F25B 1/00** (2013.01 - EP KR); **F25B 13/00** (2013.01 - EP); **F25B 49/02** (2013.01 - EP); **C09K 2205/106** (2013.01 - EP US); **C09K 2205/122** (2013.01 - KR); **C09K 2205/126** (2013.01 - CN EP US); **C09K 2205/128** (2013.01 - US); **C09K 2205/22** (2013.01 - CN EP); **C09K 2205/40** (2013.01 - EP KR US); **C10M 2207/0406** (2013.01 - US); **C10M 2207/2835** (2013.01 - US); **C10M 2209/1033** (2013.01 - US); **C10N 2040/30** (2013.01 - US); **F25B 2313/0312** (2013.01 - EP); **F25B 2313/0314** (2013.01 - EP); **F25B 2339/047** (2013.01 - EP); **F25B 2400/0403** (2013.01 - EP); **F25B 2400/0411** (2013.01 - EP); **F25B 2700/197** (2013.01 - EP); **F25B 2700/21162** (2013.01 - EP)

Citation (search report)

- [XAI] US 2017058173 A1 20170302 - FUKUSHIMA MASATO [JP]
- [XI] US 2017058172 A1 20170302 - FUKUSHIMA MASATO [JP], et al
- [X] US 2015322321 A1 20151112 - DEUR-BERT DOMINIQUE [FR], et al
- [X] US 2011253927 A1 20111020 - MINOR BARBARA HAVILAND [US], et al
- See also references of WO 2020017520A1

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